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PATENT
Attorney Docket No. 540-016.002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application Of:

V. KANKAANPAA : Confirmation No.: **6927**

Application Serial No.: **10/088,539** : Group/Art Unit: **1731**

Filing Date: **March 19, 2002** : Examiner: **Marc S. ALVO**

Title: *Method and Device for Processing Pulp*

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR RECONSIDERATION

Sir:

In response to the Official Action of March 17, 2005, applicant respectfully requests reconsideration of the rejection of claims 1-7 and 16-20 for the reasons set forth below.

More particularly, it is noted that applicant's Amendment After Final filed on January 14, 2005 has been entered pursuant to applicant's filing of a Request for Continued Examiner under 37 C.F.R. 1.114.

It is further noted that claims 1-7 and 16-20 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner particularly bases this rejection on the grounds that the term "running wheel" is indefinite and the Examiner further queries how

I hereby certify that this communication is being deposited with the United States Postal Service today, June 17, 2005, in an envelope with sufficient postage as first-class mail addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


Lisette Ramos

element (7) can function as a wheel. As is disclosed in the application specification at page 2, lines 6-9, the outer cone (conical surface 3) preferably acts as a stator and the inner cone (conical surface 3) preferably acts as a rotor onto which is fixed a running wheel (7). To help the Examiner visualize the inner and outer conical surfaces and the running wheel, an enlarged copy of Figure 1 is enclosed as Attachment #1 in which the outer conical surface (3) is shaded blue and the inner conical surface (3) is shaded yellow. The running wheel (7) (shaded green) is suitably fixed onto the inner conical surface acting as the rotor which is the yellow conical surface (3) in the enclosed figure. This is specifically mentioned in the specification at page 2, lines 9-10. Furthermore, the specification at page 2, lines 10-12 specifically states that the running wheel is perpendicular to this axis of the cone such that the flow is in a perpendicular plane with regard to the axis. The axis of conical surfaces (3) is of course a line about which the conical surfaces revolve and thus is a line which is perpendicular to the dotted line shown in Figure 1 representing the direction of cross-sectional view A-A. In short, the running wheel (7) (shaded green) is positioned on the inner conical surface (3) (shaded yellow) so as to rotate as the inner conical surface rotates in a direction which is perpendicular to the axis of rotation of the conical surfaces.

To help facilitate the Examiner's understanding of the invention as filed, enclosed as Attachment #2 herewith are additional figures (numbered 4-11) which illustrate a disperser according to the present invention, including elements not forming part of the present invention as claimed. An explanation of the figures is presented in Attachment #3. In particular, the inner conical surface (3) is clearly seen in Figures 5 and 6, with Figure 6 having a specific reference to "inner cone." Similarly, the outer conical surface (3) is also clearly seen in Figures 5 and 6 with Figure 5 having the outer conical surface labeled as "outer cone."

Furthermore, the running wheel (7) is clearly shown in Figures 7 and 9 and it is seen by comparison to Figure 1 of the present application that the running wheel (7) is in fact perpendicular to the axis of the conical surfaces.

In view of the foregoing, it is respectfully submitted that running wheel (7) does in fact function as a running wheel in that it causes the dispersing event of the dispersing pulp as a result of interaction of protruding blades (4) at the outlet end (6), to be impacted by the running wheel (7) which in fact acts as a pump by which the pulp is pumped out of the dispersing device by centrifugal force. It is therefore respectfully submitted that claims 1-7 and 16-20 are not indefinite based upon running wheel (7).

Referring now to the rejection of claims 1-3, 16 and 20 as unpatentable in view of EP 931584, in view with or without US patent 5,733,412, Markham et al (hereinafter Markham), or US patent 4,865,690, Bernard et al (hereinafter Bernard). Applicant reiterates the arguments presented in the Amendment After Final including those presented at page 7, line 27 through page 9, line 20. In particular, the Examiner relies upon EP 931584 for the proposition that Figure 5 shows surfaces to be conical in shape or at least truncated cones and in particular states that elements 3, 3', 3" and 4, 4', 4" are these conical surfaces. In fact, 3, 3' and 3" and 4, 4' and 4" are protruding blades similar to the protruding blades (4) of the present invention. The difference of course is that the protruding blades (4) of the present invention are not what is stated as being conical, but rather conical surfaces (3) are what is in fact conical. In contrast, blades (3) and (4) in EP 931584 protrude from flat planar surfaces of tool unit (1) and tool unit (2). It is clear from an examination of Figures 1 and 5 of EP 931584, that tool units (1) and (2) are not conical surfaces as specifically pointed out and claimed in claim 1 of the present invention. Thus, the method of the present invention is clearly not disclosed or suggested by the flat planar surfaces from which protruding blades (3) and (4) emanate in EP 931584.

Furthermore, as pointed out in applicant's Amendment After Final, the fact that applicant's protruding blades protrude from conical surfaces (3) gives rise to advantages over dispersing devices that have blades that emanate from planar or flat surfaces. This is specifically pointed out in the specification as filed at page 4, lines 2-6 wherein it states:

“The advantage of a conical dispersing device in regard to a planar dispersing device lies in that the number of blades may be raised 50-150% in relation to a planar dispersing device, whereby the probability of the blade meeting impurity increases considerably in the efficiency of the dispersing device is improved.”

Thus, for the same reasons as presented in applicant's remarks to the Amendment After Final, the fact that the method employs conical surfaces from which the blades protrude teaches away from the disclosure of EP 931584. Furthermore, Markham and/or Bernard do not make up for this deficiency. It is submitted that the application as originally filed clearly supports claim 1 and the dependent claims thereto. It is submitted that the attached Figures 4-5 (Attachment #2) may assist the Examiner in his understanding of the operation of the method of the present invention. An explanation of each of these figures is also presented in Attachment #3.

For all of the foregoing reasons, it is therefore respectfully submitted that EP 931584 does not teach conical surfaces from which blades (4) protrude but rather, teaches away from the present invention by disclosing blades protruding from flat surfaces (1) and (2). Since Markham and Bernard in no way disclose such conical surfaces with associated protruding blades (these references being cited by the Examiner for showing dispersing waste paper which EP 931584 is not directed to), claim 1, as well as dependent claims 2, 3 and 16-20 are believed to be distinguished over EP 931584 with or without Markham or Bernard.

Referring now to the rejection of claims 4-7 and 17-19 as obvious under 35 U.S.C. §103(a) in view of EP 931584 with or without Markham or Bernard as applied to claim 1, further in view of US patent 6,419,786, Kurtz, it is respectfully submitted that since claims 4-7 and 17-19 depend ultimately from claim 1 which is believed to be distinguished over the cited art, that these claims are further distinguished over the cited art. Furthermore, although Kurtz discloses a supply means (31) connected to the disperser (10) as shown in the figure thereof, it does not disclose the introduction of fluid to the intake side of the running wheel (7) as set forth in dependent claims 4 and 17. In this regard, applicant reiterates the statements made in the amendment filed on June 30, 2004 at page 8, lines 19-24. This introduction to the intake side of the running wheel is clearly shown by Figure 1 of the present application, wherein feed channel (10) is shown for introduction of dilution fluid (see specification at page 5, lines 14-15). Thus, the limitations set forth in claims 4 and 17 are not believed to be suggested by the supply means shown in Kurtz and therefore claims 4 and 17 are further believed to be distinguished over the cited art. It is also therefore respectfully submitted that claims 5-7, which depend either directly or indirectly from claim 4, and claims 18 and 19, which depend from claim 17, are also further distinguished over Kurtz since they add further limitations concerning the pulp dilution and density of the pulp, and since the Examiner did not show where these features are shown in Kurtz.

Referring to the Examiner's statement at page 4, lines 1-3, it is respectfully submitted that the Examiner is not appropriately understanding the conical surfaces (3) of the present invention from which blades (4) protrude as clearly shown in the specification as originally filed, including Figures 1 and 3, with Figure 3 clearly showing the blades protruding from the conical surface. Applicant's attorney again respectfully requests that the Examiner review the enclosed attachments for facilitating the understanding of the specification and drawings of the application as filed.

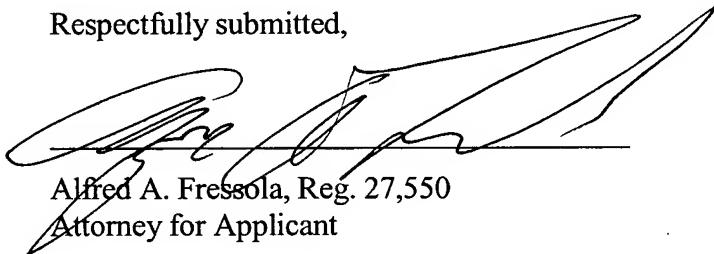
Finally, applicant's attorney respectfully requests that the Examiner reconsider the restriction of claims based upon the statement that apparatus claim 8 is obvious or anticipated by EP 931584. For the same reasons as presented with respect to claim 1, apparatus claim 8 is believed to be distinguished over EP 931584. Claims 9-15 all ultimately depend from claim 8 therefore the restriction of the claims in Group II (claims 8-15) is believed to be overcome and prosecution and allowance of claims 8-15 in the present application is earnestly solicited.

In view of the foregoing, it is respectfully submitted that the claims of the present application do in fact represent methods of dispersing pulp which are neither disclosed nor suggested by the cited art. The apparatus claims are also believed to be allowable.

If there are any remaining questions concerning the operation of the claimed method, applicant's attorney respectfully requests that the Examiner contact the undersigned attorney.

The undersigned respectfully submits that no fee is due for filing this Request for Reconsideration. The Commissioner is hereby authorized to charge to deposit account 23-0442 any fee deficiency required to submit this Request.

Respectfully submitted,



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Dated: June 17, 2005

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ATTACHMENT #3



Fig. 4 shows a disperser as a working assembly including not claimed elements such as a motor, an inlet feeding channel, etc. and the conical claimed dispersing device.

Fig. 5 shows the same elements as shown in Fig. 1 of the application, a general overview of the conical surfaces (3) with protruding blades (4).

Fig. 6 shows the rotor (inner conical surface 3) and the sectional overview of the stator (outer conical surface 3) as in claim 2. Also the protruding blades (4) can be easily seen.

Fig. 7 shows the outlet end of the conical rotor (inner conical surface 3), including the elements forming the running wheel (7) to the outlet end of the conical rotor. It shows how to introduce the dilution fluid to the intake side of the running wheel (7) via feed channels of the dilution fluid feed channel(10).

Fig. 8 is a more detailed view of feed channels of the dilution fluid feed channel (10).

Fig. 9 shows the outlet end of the conical rotor (inner conical surface 3) including the running wheel (7).

Fig. 10 shows the shape of the stator forming the outlet chamber (9).

Fig. 11 shows the feed channels of the dilution fluid feed channel 10 and the running wheel (7).